

BOARD MEETING DATE: February 6, 2015

AGENDA NO. 22

PROPOSAL: Supplement to 24-hour PM2.5 State Implementation Plan for South Coast Air Basin

SYNOPSIS: The purpose of this Supplement to the 24-hour PM2.5 SIP for the South Coast Air Basin is to demonstrate attainment of the 2006 24hour PM2.5 National Ambient Air Quality Standard by 2015 under Clean Air Act, Title 1, Part D, Subpart 4, along with updates to the transportation conformity budgets, analysis of Reasonably Available Control Measures/Reasonably Available Control Technology, control measure commitments submitted in the 2012 AQMP, and other Subpart 4 requirements.

COMMITTEE: Mobile Source Committee, January 23, 2015, Reviewed

RECOMMENDED ACTIONS:

Adopt the attached resolution:

- 1. Determining that the Supplement to the 24-hour PM2.5 SIP for the South Coast Air Basin is exempt from the requirements of CEQA; and
- 2. Approving the attached Supplement to the 24-hour PM2.5 SIP for the South Coast Air Basin for Submittal into the SIP.



Barry R. Wallerstein, D.Env. Executive Officer

Background

The 2012 AQMP was approved by the SCAQMD Board in December 2012, with additional amendments approved in February 2013, and was subsequently submitted to CARB and the U.S. EPA for inclusion into the SIP. That plan demonstrated projected attainment of the 2006 24-hour PM2.5 National Ambient Air Quality Standards (NAAQS) (35 μ g/m³) by 2014. However, a recent court decision (*Natural Res. Def. Council v. EPA*, 706 F.3d 428 (D.C. Cir. 2013)) compels U.S. EPA to evaluate the 24-

Cleaning the air that we breathen.

hour PM2.5 SIP under CAA, Title 1, Part D, Subpart 4 (hereafter "Subpart 4") requirements specific to particulate matter, in addition to the general planning provisions of Subpart 1 that were previously used for PM2.5 SIPs. Subpart 4 provides for an attainment year of 2015 for "moderate" areas, one year later than the attainment year in the 2012 AQMP. Furthermore, preliminary ambient air quality data suggests that meeting the 2006 24-hour PM2.5 NAAQS ($35 \mu g/m^3$) by the end of 2014 is not likely, largely due to unusually extreme drought conditions in the Basin. In addition, Subpart 4 Section 189(e) necessitates that control requirements applicable for major PM2.5 sources shall also apply to major sources of PM2.5 precursors unless it is determined by U.S. EPA to not be a significant contributor to PM2.5. PM2.5 has four major precursors, other than direct PM2.5 emissions, that contribute to the development of the ambient PM2.5: nitrogen oxide (NOx), sulfur oxides (SOx), volatile organic compounds (VOC), and ammonia.

It should be noted that U.S. EPA has proposed to find that the former 24-hour PM2.5 NAAQS (65 μ g/m3) has been attained, along with the previous annual PM2.5 NAAQS of 15 μ g/m3 (79, FR, 72999, Dec 9, 2014). However, this Supplement relates to the most recent 24-hour PM2.5 NAAQS of 35 μ g/m³. Attainment of the 2012 annual PM2.5 NAAQS of 12 μ g/m³ will be addressed in the upcoming 2016 AQMP.

Proposal

SCAQMD staff is proposing to supplement the previous 24-hour PM2.5 SIP submittal to address Subpart 4 provisions and requirements with the following elements that are included in this Supplement:

- Demonstration of attainment of the 24-hour PM2.5 NAAQS by 2015 with a discussion of the effects of the drought on the attainment date as weight of evidence;
- Provide new transportation conformity budgets for 2015;
- Updated RACM/RACT analysis;
- Demonstration of compliance with CAA Subpart 4, Section 189(e) that applies to PM2.5 precursors, such as VOC and ammonia, and other precursor requirements; and
- Updated list of PM2.5 control measure commitments.

Air Quality Management Plan (AQMP) and Legal Mandates

The 2012 AQMP included the following specific elements:

- Attainment demonstration of the 2006 24-hour PM2.5 NAAQS for 2014;
- A RACM/RACT analysis;
- 2014 transportation conformity budgets; and
- Control strategy including emission reduction commitments with adoption and implementation dates.

0

Since the SCAQMD Board approval of the 2012 AQMP in December 2012 with amendments in February 2013, two PM2.5 control measures, BCM-01 (Further Reductions from Residential Wood Burning Devices) and BCM-02 (Further Reductions from Open Burning), were adopted in the form of amendments to Rules 445 (Wood Burning Devices) and 444 (Open Burning), respectively. Together, these amendments generated a total of 11.7 tons of PM2.5 per day reductions on an episodic basis. These emission reductions were the only emission reduction commitments needed in the 2012 AQMP to meet the 2006 24-hour NAAQS in 2014. The only other emission reduction commitment in the 2012 PM2.5 SIP was control measure CMB-01 (Further NOx Reductions from RECLAIM) which was submitted as a contingency measure only. This control measure is anticipated to be considered by the SCAQMD Board in the first half of 2015.

Potential Outcomes and Paths Forward

Despite the 2015 attainment demonstration mentioned above, there remains considerable uncertainty in the PM2.5 monitoring results for 2014 and the meteorological conditions and frequency of rainfall that will occur in 2015. In order to demonstrate attainment the 98th percentile of the 2015 24-hr PM2.5 readings at Mira Loma has to be significantly below the standard of 35.4 ug/m3 to compensate for high exceedances caused by the drought in 2013 and 2014, achieving a 3-year average design value at or below the standard. Although additional emissions reductions are expected in 2015, attainment of the standard, given the variability of weather conditions, remains far from certain. Acknowledging this uncertainty, there are several potential outcomes and pathways for the Basin's attainment status under the Clean Air Act depending on the actual certified air quality monitoring results for 2014 and 2015.

- 24-hour PM2.5 data at Mira Loma for 2014 and 2015 is clean enough to attain the standard based on a three-year (2013-2015) average design value. The Basin could then be re-designated as attainment for this PM2.5 standard
- The three-year average design value at Mira Loma does not show attainment in 2015, but the 98th percentile of the 24-hour PM2.5 data at Mira Loma for the single year 2015 is below 35.4 μ g/m³. Under CAA Subpart 4 provisions, if this air quality condition is met, and all PM2.5 SIP commitments have been satisfied, then the Basin is eligible for a one-year attainment date extension to 2016. A second one-year extension to 2017, if the same conditions are met in 2016, is also possible.
- The three-year average design value at Mira Loma does not show attainment in 2015 and the 98th percentile of the 24-hour PM2.5 data at Mira Loma for the single year 2015 is above $35.4 \,\mu g/m^3$. Under Subpart 4 of the CAA, upon U.S. EPA's determination that the Basin failed to attain the standard by the

attainment date, the Basin would be automatically reclassified from a "moderate" nonattainment area to a "serious" non-attainment area. The new attainment deadline would be 2019, and more stringent "serious" area requirements would apply, including requirements to implement Best Available Control Measures and a lower major source threshold (70 tons per year vs. the current 100 tons per year). A full analysis for implementation of these requirements and other control measures to ensure attainment as expeditiously as practicable would be included in the 2016 AQMP, which is also addressing the annual PM2.5 standard.

California Environmental Quality Act (CEQA)

SCAQMD staff concludes that because the Supplement is not proposing to add new or delete any control measures that have the potential to have a direct or indirect adverse impact on the environment but merely presents updated analyses and other changes that do not have the potential to cause a direct or indirect adverse impact on the environment, the project is exempt under the requirements of CEQA, pursuant to CEQA Guidelines § 15061(b)(3).

Socioeconomic Analysis

No socioeconomic impact assessment is required because the proposed amendments do not add or delete control measures from the previously adopted 2012 AQMP, therefore do not "significantly affect air quality or emissions limitations." (Health & Safety Code Section 40440.8(a)).

Resource Impacts

The action would be implemented using existing staff resources committed for the 2012 AQMP implementation and is not expected to impose any significant burden.

Attachments

- A. Resolution
- B. Supplement to 24-hour PM2.5 State Implementation Plan (SIP) for South Coast Air Basin
- C. CEQA Notice of Exemption

ATTACHMENT A

RESOLUTION NO. 15-3

A Resolution of the South Coast Air Quality Management District Governing Board (SCAQMD) Governing Board approving the Supplement to the 24-hour PM2.5 State Implementation Plan (SIP) for the South Coast Air Basin and Submittal into the SIP.

A Resolution of the SCAQMD determining that the Supplement to the 24-hour PM2.5 SIP for the South Coast Air Basin is exempt from the requirements of the California Environmental Quality Act (CEQA).

WHEREAS, the 2012 Air Quality Management Plan (AQMP) was designed to address the PM2.5 SIP requirements of the federal Clean Air Act for the South Coast Air Basin (Los Angeles County, Orange County, Riverside and San Bernardino County); and

WHEREAS, the 2012 AQMP was approved by the SCAQMD Governing Board in December 2012 and AQMP amendments approved in February 2013, then subsequently submitted to the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (U.S. EPA) for inclusion into the SIP; and

WHEREAS, due to a recent court decision, approval of the 24-hour PM2.5 portion of the 2012 AQMP is now subject to Clean Air Act (CAA) Subpart 4 requirements that provide for attainment of 2006 24-hour PM2.5 National Ambient Air Quality Standard (NAAQS) ($35 \mu g/m^3$) by 2015, one year later than the attainment year in the 2012 AQMP; and

WHEREAS, the CAA Subpart 4 Section 189(e) necessitates that control requirements applicable for major PM2.5 sources shall also apply to major sources of PM2.5 precursors unless those sources do not contribute significantly to nonattainment; and

WHEREAS, the ambient air quality data suggests that meeting the 2006 24-hour PM2.5 NAAQS by the end of 2014 is not likely, largely due to unusually extreme drought conditions in the Basin; and

WHEREAS, the purpose of this Supplement to the 24-hour PM2.5 SIP for the South Coast Air Basin (Supplement) is to demonstrate attainment of the 2006 24-hour PM2.5 NAAQS by 2015 under CAA Subpart 4 as well as provide new transportation conformity budgets, updated analysis of Reasonably Available Control Measures (RACM)/ Reasonably Available Control Technology (RACT), updated control measure

commitments from those submitted in the 2012 AQMP, and demonstrate compliance with other Subpart 4 requirements; and

WHEREAS, the Supplement includes commitments for control measures that do not have quantified emission reductions but provide a strengthening of the SIP, such as measures for further study that do not contribute to the attainment demonstration and a measure designed to ensure emission reductions assumed to occur will in fact occur; and

WHEREAS, the SCAQMD staff concludes that the project is exempt from CEQA because the Supplement is not proposing to add new or delete any control measures that have the potential to have a direct or indirect adverse impact on the environment but merely presents updated analyses and other changes that do not have the potential to cause a direct or indirect adverse impact on the environment; and

WHEREAS, the SCAQMD Governing Board has determined that no socioeconomic impact will result from the Supplement; and

WHEREAS, public hearings in each affected county have been properly noticed by providing a 45-day notice in the newspapers in accordance with Health & Safety Code § 40466; and

WHEREAS, the SCAQMD Governing Board has held a final public hearing to consider approval of the Supplement in accordance with all provisions of law; and

WHEREAS, the SCAQMD specifies the manager of the Supplement as the custodian of the documents or other materials which constitute the record of proceedings upon which the approval is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California.

NOW, THEREFORE, BE IT RESOLVED, that the SCAQMD Governing Board does hereby determine that the Supplement to the 24-hour PM2.5 SIP for the South Coast Air Basin, Attachment B to the Board Letter, is exempt from the requirements of CEQA.

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board does hereby approve, pursuant to the authority granted by law, the Supplement to the 24-hour PM2.5 SIP for the South Coast Air Basin, Attachment B to the Board Letter, and incorporated herein by this reference.

BE IT FURTHER RESOLVED, that the SCAQMD staff is hereby directed to take action in accordance with the updated 2012 SIP emission reduction commitments

to attain the 24-hour PM2.5 NAAQS listed in Table F-1 of Attachment F to the Supplement, and incorporated herein by this reference.

BE IT FURTHER RESOLVED, that the SCAQMD Executive Officer is hereby directed to forward a copy of this Resolution and Supplement to the 24-hour PM2.5 SIP for the South Coast Air Basin to CARB, and to request that these documents be forwarded to the U.S. EPA for approval as part of the California SIP. In addition, the SCAQMD Executive Officer is directed to forward any other information requested by the U.S. EPA for informational purposes.

Attachment

- AYES: Antonovich, B. Benoit, J.Benoit, Burke, Cacciotti, Mitchell, Nelson, Parker, Rutherford, and Yates.
- NOES: Lyou.
- ABSENT: Buscaino and Pulido.

DATE: Jub. 6, 2015

and Mc Drain

Saundra McDaniel, Clerk of the Board

